nostril and retention of the discharge, which gradually filled the nasal cavity, became inspissated, and, through pressure, gave rise to pain and deformity. Disease of the antrum is excluded by the cessation of all symptoms after the removal of the obstruction.

THE EUSTACHIAN BOUGIE.

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I AM bound to say, from all I hear and read, that this is a much neglected and abused instrument, and will certainly come into more frequent use, notwithstanding that (*pro tem.*) English and American aurists have come to discontinue its employment. The obvious reason for this is no doubt the fear of laceration of the mucous membrane of the Eustachian tube, and the subsequent aerocele developed in neighbouring parts, or the development subsequently of otitis media purulenta. Such results have happened, and are recognized. These, however, have occurred where Politzer's bag has been employed to subsequently douche the tube after the use of the bougie.

The following detail of what I have found to be invariably a perfectly harmless method of using the Eustachian bougie may form the basis of remarks. Premising of course that there is no inflammation of the middle ear, no redness round the margins of the drum, or red streaks down the handle, and that the case is otherwise suitable—no adenoid growths, Eustachian synechiæ, etc.—the nares and post-nasum are gently irrigated with a mild carbolic lotion. An Eustachian catheter (Continental form) is introduced, and Lucae's air douche is used (with Hartman's insufflation capsule attached, filled with granules, composed of menthol, iodine, and camphor) to inflate the ear, the otoscope being used to determine results. The air douche is now detached, and a two per cent. solution each of cocaine and resorcin in distilled water (a few drops) is injected into the catheter, and blown up into the tube by the air douche. The bougie, well cleansed and marked to protrude about two centimètres beyond the beak of the catheter, is now carried up the tube ; its arrival *in situ* being recognized by means of the otoscope by a gentle click. The bougie is left *in situ* for ten minutes or so, and withdrawn, and Lucae's air douche is applied with perfect confidence. In common with others, I suppose, I have to record mishaps after the use of the bougie when I employed Politzer's bag subsequent to the withdrawal of the bougie. In some way or other abrasions of the tubal mucosa must have been effected and allowed entrance of air (to surrounding parts, down the lateral wall of pharynx and in front of the epiglottis, etc.) driven too forcibly by means of Politzer's bag. Since the disuse of Politzer's bag, and under the same circumstances, I have had no accident to record since adopting Lucae's air douche instead. With this reservation, I have no hesitation in saying that with ordinary precaution the procedure is devoid of risk. After extensive experience, such has been the case in my own practice. A

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point to be observed is to observe caution just as the bougie is about to enter the tubal ostum, for here it is that the point of the bougie is apt to catch in folds or recesses of the tube. Once past this region, somewhat more force may be used, especially when the bougie becomes engaged in the stricture, the sensation of which soon becomes evident to the experienced operator, who as well readily recognizes the moment when the bougie has reached beyond. In such cases (where the stricture is highly developed) the subsequent use of the air douche, after withdrawal of the bougie the ear welcomes a free ventilation of the cavum tympan. To dwell upon such a case for a moment (*i.e.*, a case of stricture of the Eustachian tube), the otoscope and the air douche reveal but a scanty, thin stream of air passing into the middle ear. After the use of the bougie, which in its passage generally meets with a stricture, a full stream of air is now heard, while the patient generally at once recognizes the benefit of the procedure.

Much benefit, of course, is not to be expected where there exists ankylosis of the ossicles or fixture of the stapes in the oval window. Where, however, the major part of the lesion rests in stricture of the tube, no matter how determined, great benefit ensues.

With due precautions (antiseptic, etc.) the process can be repeated every second day during a period of three weeks, when the parts are allowed to rest and results observed.

I know of no other way by which strictures of the tube can be as safely overcome. I can only refer to electrolysis and the introduction of silvered catgut (Politzer) as means but to condemn them as pernicious and dangerous. Invariably they lead to otitis media purulenta.

The bougie generally used is made of celluloid, and in Vienna goes by the name of "Urbantschitsch's bougie." Urbantschitsch, I may state, is an enthusiastic supporter of the procedure, and he tells me he has not had one unfavourable result of its use in twelve years' experience in a large *clinique*.

The stricture is no doubt due to proliferation of the adenoid tissue of the tube, and met with oftenest midway in its course.

The mere employment of the bougie in a case suitable will not of course exhaust all the measures required. The many other possibilities in nose, post-nasum and pharynx will demand equally rigid scrutiny and treatment.

To sum up. Before determining to use the bougie see that no acute or sub-acute process is going on in the middle ear; at no stage of the procedure use Politzer's bag, but throughout only Lucae's air douche, supplemented with Hartman's capsule, filled with some volatile antiseptic. Previous irrigation of nose and post-nasum with some mild antiseptic lotion cannot be omitted with safety.

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